



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

DEC 19 2017

REPLY TO THE ATTENTION OF:
WU-16J

UNDERGROUND INJECTION CONTROL
INSPECTION REPORT

Purpose: Permit Compliance Evaluation

**Owner/
Operator:** Arbor Operating, LLC

- Purchased from West Bay Exploration Company on January 9, 2015

Permittee: Arbor Operating, LLC of Traverse City, Michigan

- Transferred on February 25, 2016

Facility: TEL #B2-25 SWD

EPA #: MI-101-2D-C030

MDEQ #: MIS-47875

**Date(s) of
Inspection:** September 24, 2015

**EPA
Representative(s):** Tim Elkins, Enforcement Officer, (312) 886-0263;
Jeffrey Wawczak, Enforcement Officer, (312) 886-1988

**State
Representative(s):** None

**Facility
Representative(s):** James N. Eichstadt, Manager, Arbor Operating, LLC

**Report
Prepared by:** Tim Elkins, Enforcement Officer

**Inspector
Signatures:**

Tim Elkins 11/13/17

James N. Eichstadt 11/13/17

BACKGROUND

The purpose of this report is to document EPA's evaluation of Arbor Operating, LLC for compliance with the EPA permitted conditions and the Underground Injection Control (UIC) provisions of the Safe Drinking Water Act (SDWA) at one of its injection well facility in Michigan. Arbor Operating, LLC (or "Arbor Operating" or "the Company") owns and operates the TEL #B2-25 SWD (EPA # MI-101-2D-C030) disposal well in Manistee County, Michigan. Arbor Operating both purchased the TEL #B2-25 SWD well from West Bay Exploration Company, and submitted an "Application to Transfer Permit" to EPA on January 9, 2015. At the time of EPA's inspection, the well was owned and operated by Arbor Operating. EPA transferred the permit from West Bay Exploration Company to Arbor Operating on February 25, 2016 after Arbor Operating established a new financial responsibility mechanism to plug and abandon the well.

EPA's authority to enter and inspect Arbor Operating's premises is expressed in Part I (E)(7) Inspection and Entry of the EPA permit referenced above. The underground injection of Class II fluids (e.g. produced brine or saltwater) is a process regulated by EPA in Michigan.

The EPA permit referenced above authorizes the Company to operate its injection well for commercial disposal of fluids related to the production of oil and gas and oilfield-contaminated groundwater as approved by EPA. Presently there are 270 approved sources of oil field brine permitted for disposal into the TEL #B2-25 SWD. Approved sources are identified by field name, specific location (i.e. "township, range, and section" or "Rectangular Survey System" location), and formation name, in Part III (D) List of Presently Approved Sources of the permit. No fluids other than those from sources identified in Part III (D) and approved by the Director shall be injected. EPA last witnessed mechanical integrity tests (MITs) of the injection well conducted by the Company in October 2014.

The permit limits injection into the Dundee Formations at a maximum injection pressure of 434 pounds per square inch gauge (psig) at the surface. Monitoring and reporting requirements for the well are detailed in Part II (B)(2)(a) - (d), Part II (B)(3)(a) - (d), and Part III (A) of the permit.

In accordance with Part I (E)(2) of the EPA permit, any person who operates the well in violation of permit conditions is subject to civil penalties, fines, and other enforcement actions under SDWA, and may be subject to such actions under the Resources Conservation and Recovery Act. Any person who willfully violates a permit condition is subject to criminal prosecution.

SITE INSPECTION

Entrance and Briefing

On September 24, 2015, EPA Inspectors Tim Elkins and Jeffrey Wawczak, arrived at Arbor Operating's TEL #B2-25 SWD facility at 1:16 pm ("Eastern Daylight Time" or "EDT"). EPA Inspectors met with James Eichstadt, of Arbor Operating, LLC. Mr. Elkins explained that the purpose of the inspection was to make observations and evaluate compliance with the facility's EPA regulated operations. Mr. Elkins and Mr. Wawczak presented EPA Inspector Credentials, and served a notice of inspection (Attachment A). Mr. Eichstadt signed the notice of inspection as the "Facility Representative" and Mr. Elkins signed as the EPA "Inspector."

Mr. Elkins discussed safety requirements during the inspection, and Mr. Eichstadt indicated that no additional safety measures were required by the Company. Mr. Elkins also explained EPA's "Small

Business” definition, and provided the U.S. EPA Small Business Resource Information Sheet¹ to ensure awareness of the Small Business Regulatory Enforcement Fairness Act (SBREFA) and the Agency’s Small Business Compliance Policy.

Process Description

Arbor Operating currently owns and operates approximately 27 active oil production wells, 19 active natural gas production wells², and five saltwater or brine disposal wells. Salt water and fluids generated during the production of oil (i.e. oil field brines) are piped or trucked from Arbor Operating’s production wells, to its tank battery, and then to the TEL #B2-25 SWD injection well for disposal.

Areas Inspected

The TEL #B2-25 SWD facility is located on the north side of Tannerville Road, east of Elm Road, in Manistee County. The well is located at the end of a gravel access road, approximately 900 feet from the main road. The surrounding land is primarily forest and agricultural lands. No sign of spills or leaks were observed at the wellhead or on the gravel well pad while onsite.

At the time of EPA’s inspection, Arbor Operating was not accepting brine on a commercial basis. Mr. Eichstadt stated injection fluid was mostly transported via underground steel piping to the injection well from the Company’s nearby wells. The Company’s Weller 11-25 oil production well (MDEQ #44166) is downhill and approximately 530 feet due north of the TEL #B2-25 SWD. A small direct drive pump is used to move waste fluids from the separator, up gradient to the TEL #B2-25 SWD for disposal. EPA observed 62 psig on the pump while the well was injecting.

Gauges were present on the tubing and annulus of the TEL #B2-25 SWD. Mr. Eichstadt stated injection and annulus pressures are measured from the mechanical gauges on a daily basis. Mr. Eichstadt indicated the facility is equipped with a high pressure shut down and Murphy Pressure Switchgauge to prevent spills and over pressurization of the well. The annulus appeared closed and sealed. Mr. Eichstadt stated Bryan Klump, Operations Manager for Arbor Operating, records the loss or addition of annulus fluid on a quarterly basis. All records are maintained in the Company’s Traverse City office.

The TEL #B2-25 SWD facility includes a large battery containing eight 400 bbl. oil and water storage tanks within a lined secondary containment area. A 210 bbl. tank and a decommissioned 100 bbl. blow down tank were also onsite. Mr. Eichstadt specified that the facility’s tanks had all recently been cleaned out and “de-sludged”; and all waste was haul by Northern A-1 for disposal offsite.

Exit Briefing

At the completion of the inspection, Mr. Elkins stated that an inspection report would be mailed to the Company upon completion of EPA’s evaluation and records review. Although the Company wasn’t currently accepting fluids on a commercial basis (from production wells not owned or operated by Arbor Operating), Mr. Elkins reminded Mr. Eichstadt to ensure that the Company requests EPA approval of all new sources not presently listed in Part III (D) of the TEL #B2-25 SWD permit. Mr. Elkins thanked Mr. Eichstadt for his time and encouraged him to contact EPA if

¹ EPA Site: U.S. EPA Small Business Resources Information Sheet (<https://www.epa.gov/sites/production/files/2017-06/documents/smallbusinessinfo.pdf>)

² MDEQ Site: Michigan Oil, Gas, and Mineral Division Data Portal (<http://www.deq.state.mi.us/dataminer/>)

he had any questions. EPA staff cleared the site at 4:05 pm EDT.

Post Inspection Document Review

After the inspection Mr. Elkins reviewed all monthly and quarterly reports submitted by Arbor Operating, LLC for the TEL #B2-25 SWD (EPA # MI-101-2D-C030) disposal well in 2016 and 2017.

EPA found that all monthly monitoring reports submitted for the well by the Company in 2016 and 2017 consistently reported injection pressure as "VAC" (i.e. vacuum). Reporting requirements detailed in Part II (B)(3)(a) Monthly Reports of the permit state that monthly reports shall include the "weekly measurements" of injection pressure, annulus pressure, flow rate, and cumulative volume as required in Parts II (B)(2)(d) and III (A) of the permit. Wells injecting on a vacuum can report measurements in either "Hg (inches of Mercury) or negative psig.

Every monthly report submitted by the Company for the years listed above consistently reported annulus pressure as exactly "0" in every report for the TEL #B2-25 SWD.

The January - April 2017 monthly reports submitted by the Company did not check the "No" or "Yes" box on the report regarding if "there have been any changes in characteristic or source fluids that are being injected?"

The quarterly annulus fluid loss submission for the well in March 2017 reported nine gallons of fluid lost. Excessive fluid loss can indicate possibly leaks in the tubing, casing, or packer.

In accordance with Part II (B)(3)(b) Quarterly Reports, brine manifests and any comparable non-brine records shall be submitted quarterly and must be either a copy of the State Report for commercial haulers or the permittee's records of deliveries by various haulers. Arbor Operating has not submitted any quarterly brine manifest reports since acquiring TEL #B2-25 SWD. At the time of the inspection, the Company was not accepting fluids from other companies.

Part II (B)(3)(b) Quarterly Reports (iii) and Part III (A) of the TEL #B2-25 SWD permit require a quarterly chemical composition analysis (i.e. brine analysis) of injected fluid. EPA received one brine analysis for the TEL #B2-25 SWD in 2016, and no brine analyses for the well in 2017.

SUMMARY

Weekly, monthly, and quarterly reporting requirements are outlined in the permit, including "weekly measurements" of injection pressure, annulus pressure, flow rate, and cumulative volume; and quarterly injection fluid analyses and brine manifest reports. To ensure the well is operated in accordance with federal requirements at all times, Arbor Operating, LLC should review, and must follow, all conditions outlined in its EPA permits.

In accordance with Part I (E)(9)(g) Other Information, if or when the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in any report to the Director, the permittee shall promptly submit such facts or corrected information. Part I (E)(9)(f) Other Noncompliance requires that the permittee shall report all other instances of noncompliance. The reports shall contain the information listed in Part I (E)(9)(e)(ii) of the permit.

ATTACHMENTS

- A) Notice of Inspection
- B) U.S. EPA Small Business Resources Information Sheet

Attachment A



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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REPLY TO THE ATTENTION OF:
WU-16J

NOTICE OF INSPECTION

Underground Injection Control Program

Date: 9/24/15. Time: 1:16 PM EASTERN

Facility to be Inspected:

M1-101-ZD - C030 TEL #B2-25 SWD

Company Name & Address:

WEST BAY EXPLORATION & ARBOR OPERATING LLC.
104 SOUTH UNION STREET
SUITE 202

TRAVERSE CITY, MI 49684

Notice of Inspection is hereby given according to
Section 1445(b) of the Safe Drinking Water Act
(42 U.S.C § 300 (f) et seq.)*

Reason for Inspection:

For the purpose of inspecting records, files, papers, processes, controls and facilities, and /or obtaining samples to determine whether the person subject to an applicable underground injection control program has acted or is acting in compliance with the Safe Drinking Water (SDWA) and any applicable permit or rule.

*Sections 1445(b)(1) and (c) of the SDWA (42 U.S.C § 300 j-4(b)) are quoted on the back of this notice.

Received by:

Inspector:

Jim N. Eichstaedt

(Facility Representative)

(Date)

William M. Egan

Text of section 1445(b) (1) and (c) of the Safe Drinking Water Act:

.....

(b)(1) Except as provided in paragraph (2), the Administrator, or representatives of the Administrator duly designated by him, upon presenting appropriate credentials and a written notice to any supplier of water or other person subject to

(A) a national primary drinking water regulation prescribed under Section 1412,

(B) an applicable underground injection control program, or

(C) any requirement to monitor an unregulated containment pursuant to subsection (a), or person in charge of any of the property of such supplier or other person referred to in clause (A), (B), or (C), is authorized to enter any establishment, facility, or other property of such supplier or other persons in order to determine whether such supplier or other person has acted or is acting in compliance with this title, including for this purpose, inspection at reasonable times, of records, files, papers, processes, controls, and facilities, or in order to test any feature of public water system, including its raw water source. The Administrator or the Comptroller General (or any representative designated by either) shall have access for the purpose of audit and examination to any records, reports, or information of a grantee which are required to be maintained under subsection (a) or which are pertinent to any financial assistance under this title.

.....

(c) Whoever fails or refuses to comply with any requirement of subsection (a) of this section or to allow the Administrator, the Comptroller General, or representatives of either, to enter and conduct any audit or inspection authorized by subsection (b) or this section shall be subject to a civil penalty or not to exceed \$25,000.

.....

*Amendments to EPA's Civil Penalty Policies to Implement the 2008 Civil Monetary Penalty Inflation Adjustment Rule (Effective January 12, 2009)

Violations of the Safe Drinking Water Act and Underground Injection Control regulations are subject to Administrative Orders which may include penalties of up to \$187,500, civil penalties of up to \$37,500 per day of violation and criminal penalties of up to three years imprisonment and fines in accordance with Title 18 of the United States Code.

Attachment B

U.S. EPA Small Business Resources Information Sheet

The United States Environmental Protection Agency provides an array of resources to help small businesses understand and comply with federal and state environmental laws. In addition to helping small businesses understand their environmental obligations and improve compliance, these resources will also help such businesses find cost-effective ways to comply through pollution prevention techniques and innovative technologies.

Office of Small and Disadvantaged Business Utilization (OSDBU)

www.epa.gov/aboutepa/about-office-small-and-disadvantaged-business-utilization-osdbu

EPA's OSDBU advocates and advances business, regulatory, and environmental compliance concerns of small and socio-economically disadvantaged businesses.

EPA's Asbestos Small Business Ombudsman (ASBO)

www.epa.gov/resources-small-businesses/asbestos-small-business-ombudsman or 1-800-368-5888

The EPA ASBO serves as a conduit for small businesses to access EPA and facilitates communications between the small business community and the Agency.

Small Business Environmental Assistance Program

<https://nationalsbeap.org>

This program provides a "one-stop shop" for small businesses and assistance providers seeking information on a wide range of environmental topics and state-specific environmental compliance assistance resources.

EPA's Compliance Assistance Homepage

www.epa.gov/compliance

This page is a gateway to industry and statute-specific environmental resources, from extensive web-based information to hotlines and compliance assistance specialists.

Compliance Assistance Centers

www.complianceassistance.net

EPA sponsored Compliance Assistance Centers provide information targeted to industries with many small businesses. They were developed in partnership with industry, universities and other federal and state agencies.

Agriculture

www.epa.gov/agriculture

Automotive Recycling

www.ecarcenter.org

Automotive Service and Repair

www.ccar-greenlink.org or 1-888-GRN-LINK

Chemical Manufacturing

www.chemalliance.org

Construction

www.cicacenter.org

Education

www.campuserc.org

Food Processing

www.fpeac.org

Healthcare

www.hercenter.org

Local Government

www.lgean.org

Surface Finishing

<http://www.sterc.org>

Paints and Coatings

www.paintcenter.org

Printing

www.pneac.org

Ports

www.portcompliance.org

Transportation

www.tercenter.org

U.S. Border Compliance and Import/Export Issues

www.bordercenter.org

EPA Hotlines and Clearinghouses

www.epa.gov/home/epa-hotlines

EPA sponsors many free hotlines and clearinghouses that provide convenient assistance regarding environmental requirements. Examples include:

Clean Air Technology Center (CATC) Info-line

www.epa.gov/catc or 1-919-541-0800

Superfund, TRI, EPCRA, RMP, and Oil Information Center

1-800-424-9346

EPA Imported Vehicles and Engines Public Helpline

www.epa.gov/otaq/imports or 1-734-214-4100

National Pesticide Information Center

www.npic.orst.edu or 1-800-858-7378

National Response Center Hotline to report oil and hazardous substance spills - <http://nrc.uscg.mil> or 1-800-424-8802

Pollution Prevention Information Clearinghouse (PPIC) -

www.epa.gov/p2/pollution-prevention-resources#ppic or 1-202-566-0799

Safe Drinking Water Hotline -

www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline or 1-800-426-4791

Toxic Substances Control Act (TSCA) Hotline

tsc hotline@epa.gov or 1-202-554-1404

Small Entity Compliance Guides

<https://www.epa.gov/reg-flex/small-entity-compliance-guides>

EPA publishes a Small Entity Compliance Guide (SECG) for every rule for which the Agency has prepared a final regulatory flexibility analysis, in accordance with Section 604 of the Regulatory Flexibility Act (RFA).

Regional Small Business Liaisons

www.epa.gov/resources-small-businesses/epa-regional-office-small-business-liaisons

The U.S. Environmental Protection Agency (EPA) Regional Small Business Liaison (RSBL) is the primary regional contact and often the expert on small business assistance, advocacy, and outreach. The RSBL is the regional voice for the EPA Asbestos and Small Business Ombudsman (ASBO).

State Resource Locators

www.envcap.org/statetools

The Locators provide state-specific contacts, regulations and resources covering the major environmental laws.

State Small Business Environmental Assistance Programs (SBEAPs)

<https://nationalsbeap.org/states/list>

State SBEAPs help small businesses and assistance providers understand environmental requirements and sustainable business practices through workshops, trainings and site visits.

EPA's Tribal Portal

www.epa.gov/tribalportal

The Portal helps users locate tribal-related information within EPA and other federal agencies.

EPA Compliance Incentives

EPA provides incentives for environmental compliance. By participating in compliance assistance programs or voluntarily disclosing and promptly correcting violations before an enforcement action has been initiated, businesses may be eligible for penalty waivers or reductions. EPA has two such policies that may apply to small businesses:

EPA's Small Business Compliance Policy

www.epa.gov/enforcement/small-businesses-and-enforcement

EPA's Audit Policy

www.epa.gov/compliance/epas-audit-policy

Commenting on Federal Enforcement Actions and Compliance Activities

The Small Business Regulatory Enforcement Fairness Act (SBREFA) established a SBREFA Ombudsman and 10 Regional Fairness Boards to receive comments from small businesses about federal agency enforcement actions. If you believe that you fall within the Small Business Administration's definition of a small business (based on your North American Industry Classification System designation, number of employees or annual receipts, as defined at 13 C.F.R. 121.201; in most cases, this means a business with 500 or fewer employees), and wish to comment on federal enforcement and compliance activities, call the SBREFA Ombudsman's toll-free number at 1-888-REG-FAIR (1-888-734-3247).

Every small business that is the subject of an enforcement or compliance action is entitled to comment on the Agency's actions without fear of retaliation. EPA employees are prohibited from using enforcement or any other means of retaliation against any member of the regulated community in response to comments made under SBREFA.

Your Duty to Comply

If you receive compliance assistance or submit a comment to the SBREFA Ombudsman or Regional Fairness Boards, you still have the duty to comply with the law, including providing timely responses to EPA information requests, administrative or civil complaints, other enforcement actions or communications. The assistance information and comment processes do not give you any new rights or defenses in any enforcement action. These processes also do not affect EPA's obligation to protect public health or the environment under any of the environmental statutes it enforces, including the right to take emergency remedial or emergency response actions when appropriate. Those decisions will be based on the facts in each situation. The SBREFA Ombudsman and Fairness Boards do not participate in resolving EPA's enforcement actions. Also, remember that to preserve your rights, you need to comply with all rules governing the enforcement process.

EPA is disseminating this information to you without making a determination that your business or organization is a small business as defined by Section 222 of the Small Business Regulatory Enforcement Fairness Act or related provisions.